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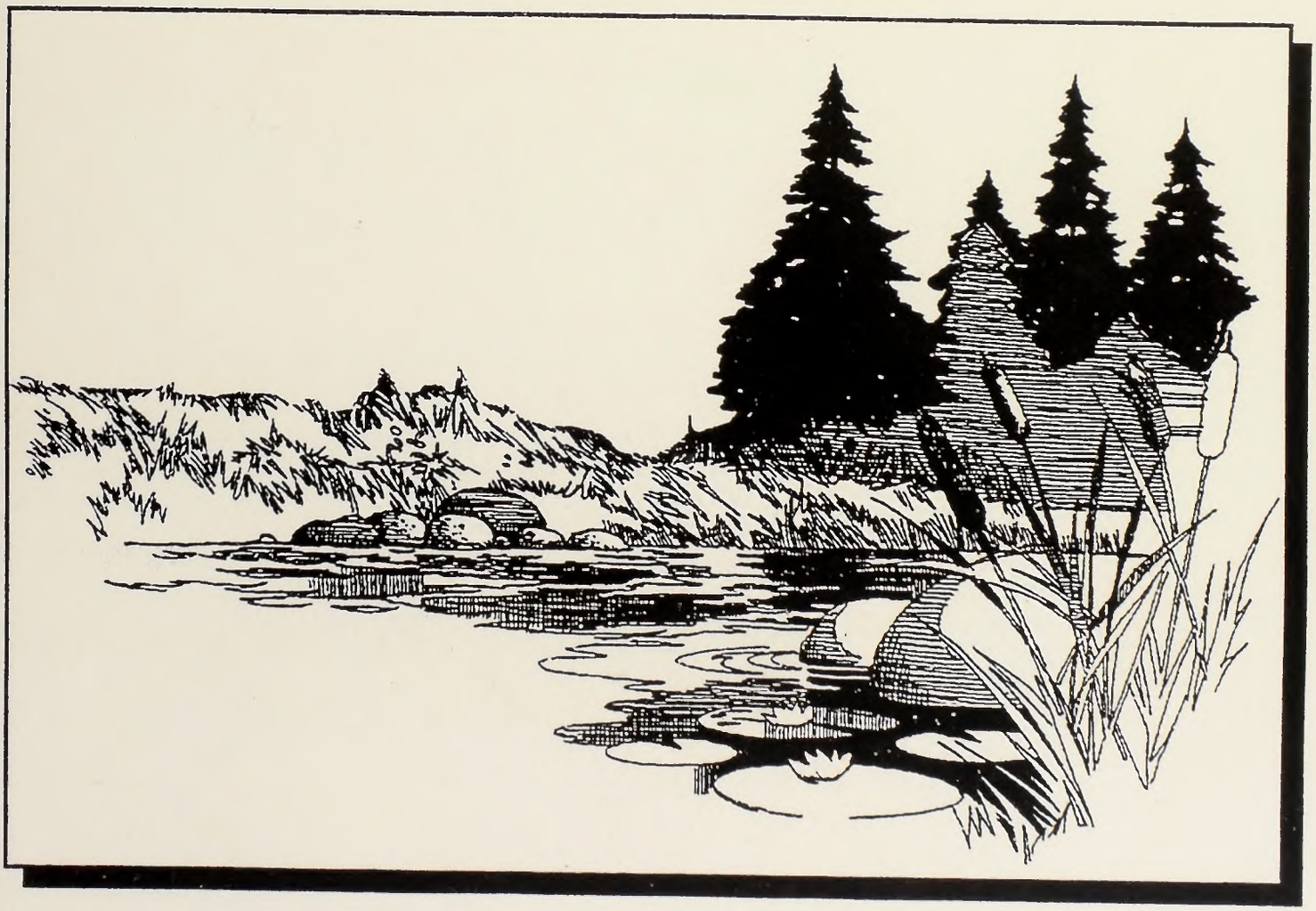
Riparian – Wetland Initiative For The 1990's

Annual Report of Accomplishments
Fiscal Year 1995



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U.S. Department of the Interior
Bureau of Land Management

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RIPARIAN-WETLAND INITIATIVE FOR THE 1990's

Fiscal Year 1995

ANNUAL REPORT OF ACCOMPLISHMENTS

Mission of the U.S. Department of the Interior

As the Nation's principal conservation agency, the U.S. Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, and preserving the environmental and cultural values of our national parks and historic places.

The Interior Department also assesses our mineral resources and works to ensure that their development is in the best interest of all the people.

In addition, the Department has a major responsibility for American Indian reservation communities and for people who live in the Island Territories under United States administration.

After many years of discussing a "Home Department," Congress in 1849 decided that the creation of a Department of the Interior had become necessary to administer the vastly expanded land holdings acquired by the Federal Government through the Louisiana Purchase of 1803, the Mexican war of 1846-48 and the 1846 treaty with Great Britain by which the United States acquired the Oregon Territory. In addition to the General Land Office, custodian of these lands, the new Interior Department was given functional responsibility for the Office of Indian Affairs, Pension Office, Patent Office, and several smaller agencies, including the Census of the United States.

Over the many years since that time, other duties have been added and spun off, and the Department of the Interior's role has changed from that of a general housekeeper for the Federal Government to that of custodian of its natural resources.

The Department manages more than 440 million acres of Federal lands, including some 360 national parks, about 500 wildlife refuges, and vast areas of multiple-use lands. The Interior Department's agencies are the National Park Service, U.S. Fish and Wildlife Service, National Biological Service, Bureau of Land Management, Minerals Management Service, Office of Surface Mining Reclamation and Enforcement, U.S. Geological Survey, Bureau of Reclamation, and the Bureau of Indian Affairs.

Introduction

This is the Fifth Annual Accomplishments Report of the *Riparian-Wetland Initiative for the 1990's*, a blueprint for managing and restoring riparian-wetland areas that cover about 16,102,000 acres of wetlands and 180,600 miles of streams on BLM-managed lands. Overall, riparian-wetland areas account for more than 8 percent of the 270 million acres of land under BLM management.

The principal goal of the Riparian-Wetland Initiative is to restore and maintain riparian-wetland areas so that at least 75 percent are in proper functioning condition by 1997. The initiative, which complements the Healthy Rangelands Strategy of President Clinton and Secretary of the Interior Bruce Babbitt, takes an interagency and interdisciplinary approach to the management of riparian-wetland areas. The rangelands strategy took effect in 1995.

This report highlights the BLM's accomplishments in riparian-wetland management during Fiscal Year 1995. It gives examples of the BLM's commitment to protecting riparian-wetland areas, which are environmentally and economically valuable. It also shows how the agency is working to attain the land stewardship and wetlands conservation goals of the President and the Secretary.

[NOTE: For a list of the BLM's riparian staff, please see pages 41–43.]

Importance of Riparian-Wetland Areas

Riparian areas are lands adjacent to creeks, streams, lakes, and rivers. They are sometimes called "green ribbons" because the vegetation on waterway banks forms a ribbon-like pattern when seen from the air.

These areas, containing scarce water and vegetation in the otherwise arid Western United States, are important to fish and wildlife species, as well as to livestock. Since they filter the water flowing through them, riparian-wetland areas can affect the health of entire watersheds.

Wetlands are generally defined as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support vegetation that is typically adapted for life in saturated soil. Wetlands include bogs, marshes, shallows, muskegs, wet meadows, estuaries, and riparian areas.

Riparian areas and wetlands are discussed together for purposes of reporting the BLM's progress in meeting its national goals.

Estimated Riparian-Wetland Acreage by State

(most recent data available)

State	BLM-Administered Land	Standing-water Wetland (Lentic) Acres	Flowing-water Riparian (Lotic) Miles
Alaska	88,860,328	15,605,650	140,690
Arizona	14,255,889	21,968	850
California	17,284,258	62,393	3,000
Colorado	8,302,918	6,566	4,661
Eastern States	18,576*	4,300	10
Idaho	11,848,706	13,309	3,954
Montana	8,415,670**	63,879	4,675
Nevada	47,969,220	33,748	2,294
New Mexico	12,890,373***	672	418
Oregon/ Wash.	16,074,621	252,000	8,504
Utah	22,147,772	18,284	4,644
Wyoming	18,402,177****	19,599	6,913
Total	**266,470,508**	**16,102,368**	**180,613**

* Includes Alabama, Arkansas, Florida, Illinois, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, and Wisconsin
** Includes North Dakota and South Dakota
*** Includes Oklahoma
**** Includes Nebraska

Proper Functioning Condition

A riparian-wetland area is healthy and functioning when adequate vegetation, landform, or large woody debris is present to dissipate energy associated with high water flow. A healthy riparian-wetland area exhibits certain characteristics, such as:

- Purifying water by removing sediments as water moves through;
- Reducing the risk of flood damage;
- Reducing streambank erosion;
- Increasing available water by holding water in streambanks and aquifers;
- Maintaining instream flows and streambanks;
- Increasing ground water supplies;
- Supporting a diversity of wildlife and plant species;
- Maintaining habitat for healthy fish populations;
- Providing water, forage, and shade for livestock;
- And creating opportunities for recreationists to fish, camp, picnic, and relax.

Condition of Riparian-Wetland Areas

The following tables and graphs (on pages 7, 7a, and 7b) depict the condition of riparian-wetland areas on BLM-managed lands for 11 Western States in fiscal year 1995. (For information on Alaska, see page 8.) Assessments planned for riparian-wetland areas now in the "unknown" category are expected to show similar distribution in the proper functioning, functional-at-risk, and non-functional categories.

Condition of Riparian-Wetland Areas by Class in 1995

(by miles in the Western States, excluding Alaska)

Flowing-water Riparian Miles

(pertaining to miles of lotic habitat areas)

Condition Class	% of All Miles	% of Miles Assessed
Proper Functioning Condition	27%*	37%***
Functional-at-Risk (susceptible to degradation)	33	46
Non-functional	12	17
Unknown	28**	(Not applicable)

Standing-water Wetland Acres

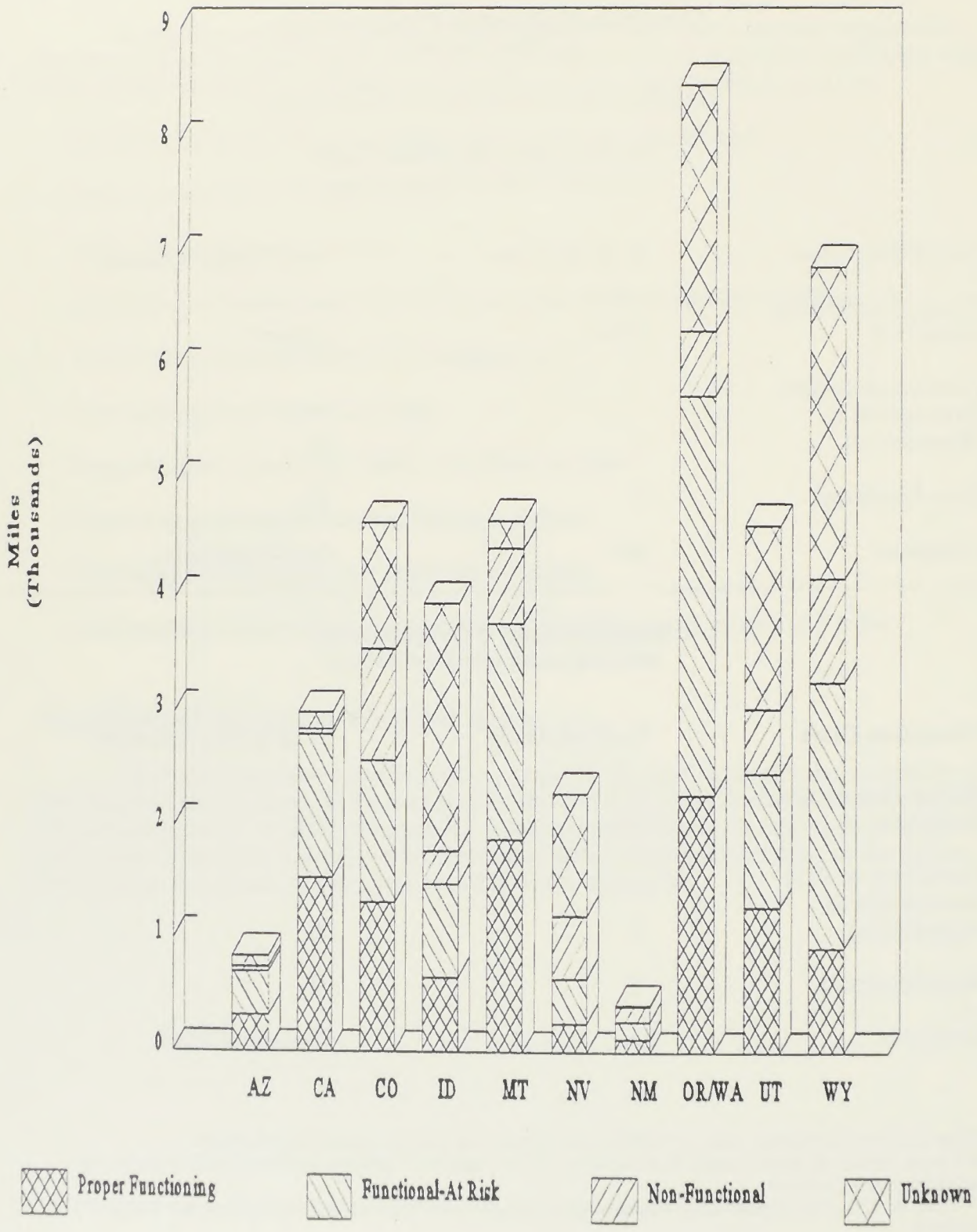
(pertaining to acres of lentic habitat areas)

Condition Class	% of All Acres	% of Acres Assessed
Proper Functioning Condition	16%	61%
Functional-at-Risk (susceptible to degradation)	8	30
Non-functional	3	9
Unknown	73	(Not applicable)

* That is, 27% of all riparian miles on BLM land are known to be in proper functioning condition.
** That is, 28% of all riparian miles on BLM land are in the "unknown" category, meaning the BLM has not yet determined their condition.
*** That is, 37% of the riparian miles that have been assessed by the BLM are known to be in proper functioning condition.

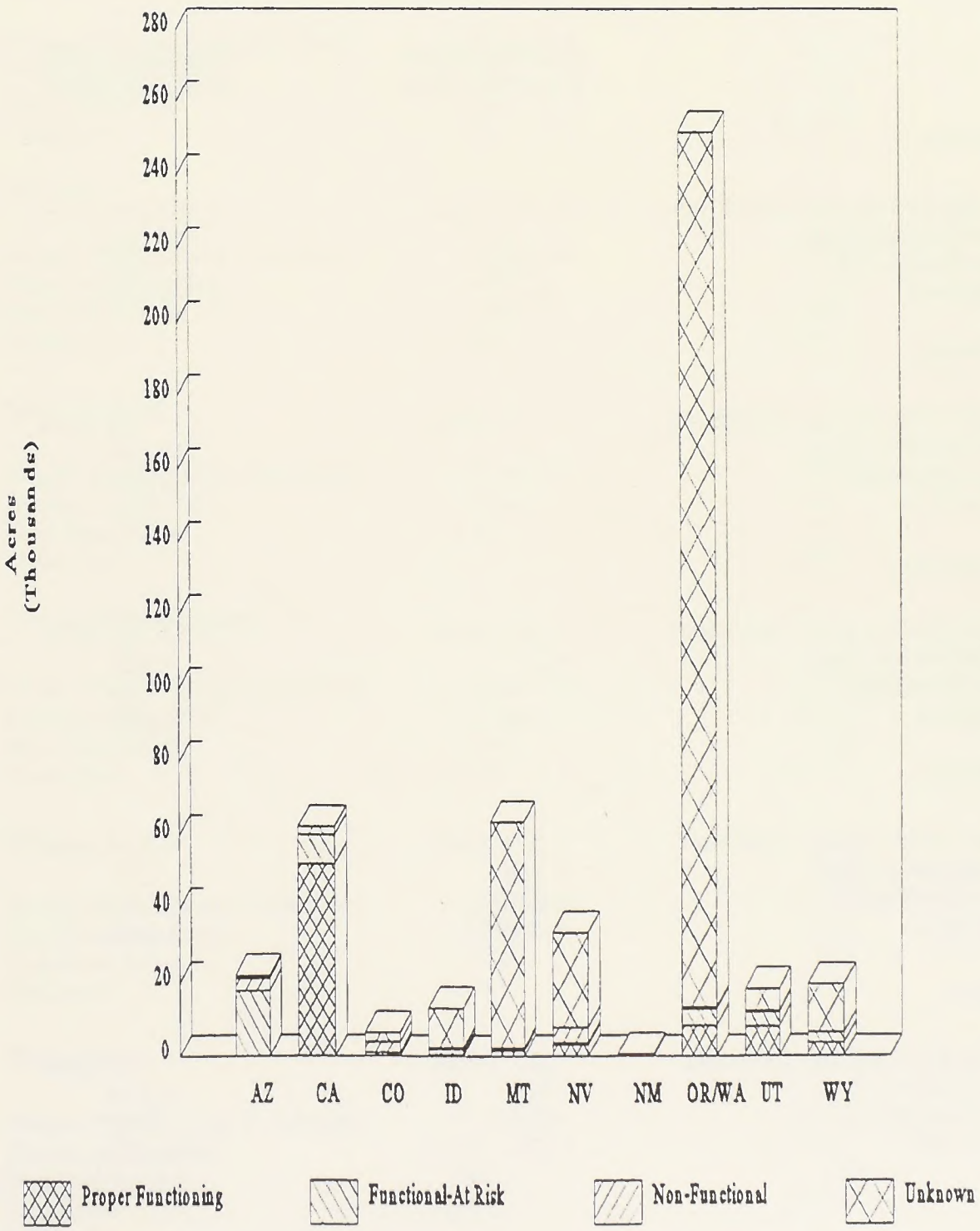
Flowing–Water Riparian (lotic) Miles

FY 1995



Standing–Water Wetland (lentic) Acres

FY 1995



What follows is information showing the functioning condition of riparian-wetland areas on BLM-managed lands at the end of fiscal year 1995. The condition classes are shown by State in miles for streams and acres for wetlands. There are four classes: Proper Functioning Condition, Functional-at-Risk, Non-functional, and Unknown. Those terms are defined in the section that follows this information.

	Flowing-water Riparian Miles	**Standing-water Wetland Acres**
Alaska:		
Proper Functioning Condition:	131,483 miles	12,565,000 acres
Functional-at-Risk:	32	102,000
Non-functional:	818	650
Unknown:	8,357	2,938,000
Arizona:		
Proper Functioning Condition:	319 miles	85 acres
Functional-at-Risk:	391	17,834
Non-functional:	38	3,207
Unknown:	102	842
California:		
Proper Functioning Condition:	1,543 miles	52,186 acres
Functional-at-Risk:	1,270	7,922
Non-functional:	47	50
Unknown:	140	2,235
Colorado:		
Proper Functioning Condition:	1,323 miles	939 acres
Functional-at-Risk:	1,254	277
Non-functional:	978	2,900
Unknown:	1,106	2,450
Idaho:		
Proper Functioning Condition:	659 miles	981 acres
Functional-at-Risk:	825	1,116
Non-functional:	296	192
Unknown:	2,174	11,020

	Flowing-water Riparian Miles	Standing-water Wetland Acres
Montana (includes North Dakota and South Dakota):		
Proper Functioning Condition:	1,884 miles	1,523 acres
Functional-at-Risk:	1,892	324
Non-functional:	658	758
Unknown:	241	61,274
Nevada:		
Proper Functioning Condition:	254 miles	3,352 acres
Functional-at-Risk:	400	447
Non-functional:	558	4,077
Unknown:	1,082	25,872
New Mexico:		
Proper Functioning Condition:	117 miles	266 acres
Functional-at-Risk:	160	144
Non-functional:	136	32
Unknown:	5	230
Oregon/Washington:		
Proper Functioning Condition:	2,282 miles	8,632 acres
Functional-at-Risk	3,498	4,332
Non-functional:	568	729
Unknown:	2,156	238,307
Utah:		
Proper Functioning Condition:	1,288 miles	8,295 acres
Functional-at-Risk:	1,180	3,590
Non-functional:	571	533
Unknown:	1,605	5,866
Wyoming:		
Proper Functioning Condition:	925 miles	3,671 acres
Functional-at-Risk:	2,341	2,877
Non-functional:	906	58
Unknown:	2,741	12,993

	Flowing-water Riparian Miles	Standing-water Wetland Acres
Total BLM (excluding Eastern States):		
Proper Functioning Condition:	142,077 miles	12,644,930 acres
Functional-at-Risk:	13,243	140,863
Non-functional:	5,574	13,186
Unknown:	19,709	3,299,089
Total BLM (excluding Alaska and Eastern States):		
Proper Functioning Condition:	10,594 miles	79,930 acres
Functional-at-Risk:	13,211	38,863
Non-functional:	4,756	12,536
Unknown:	11,352	361,089

Definitions of Condition Classes

The functioning condition of riparian-wetland areas is determined by an interaction of geology, soil, water, and vegetation. The condition classes depicted in the preceding section are defined as follows:

• **Proper Functioning Condition.** Riparian-wetland areas are properly functioning when adequate vegetation, landform, or large woody debris is present to:

– Dissipate stream energy associated with high waterflows, thereby reducing erosion and improving water quality;
– Filter sediment, capture bedload, and aid floodplain development;
– Improve flood-water retention and ground water recharge;
– Develop root masses that stabilize streambanks against cutting action;
– Develop diverse ponding and channel characteristics necessary for fish production, waterfowl breeding, and other uses;
– And support greater biodiversity.

• **Functional-at-Risk.** Riparian-wetland areas are considered functional-at-risk when they function but are susceptible to degradation due to soil, water, or vegetation characteristics.

• **Non-functional.** Riparian-wetland areas are deemed non-functional when they do not provide adequate vegetation, landform, or large woody debris to dissipate stream energy and thus do not reduce erosion or improve water quality. The absence of certain physical characteristics, such as a floodplain, is an indicator of a non-functional riparian-wetland area.

• **Unknown.** Riparian-wetland areas in this category are those whose functioning condition has not been determined because the BLM lacks sufficient information about them.

Future Management of Riparian-Wetland Areas

As the BLM works to achieve proper functioning condition on riparian-wetland areas, the agency is developing a Bureauwide standard for monitoring and reporting improvements in conditions so it can better assess and document progress. In 1989, each State prepared individual strategies that identified projected funding needs for riparian management activities for fiscal years 1991 to 1995. Other needs were identified independently in *Waterfowl Habitat Management on Public Lands*, prepared as part of a *Fish and Wildlife 2000* national strategy plan series. The BLM is concentrating on inventory, planning, proper management, monitoring, project development, and project maintenance. These needs are being updated as more information becomes available.

Summary of the BLM's 1995 Accomplishments

The BLM continues to make progress in meeting the goals of the *Riparian-Wetland Initiative for the 1990's*. The following summary of accomplishments, based on data collected through Fiscal Year 1995, shows how the agency is improving riparian-wetland conditions in the West. In FY 1995, the BLM:

• Completed 254 riparian-related activity plans, which included the preparation or revision of at least two resource management plans that dealt with riparian issues.

• Applied intensive management to 974 miles of streams and 7,269 acres of wetlands in the contiguous Western States.

• Accomplished riparian inventory assessments on 8,715 miles of streams and 28,119 acres of riparian-wetlands in the contiguous Western States and on 99 miles of streams and 43,885 acres of wetlands in Alaska. These assessments included determinations of functioning condition status.

• Developed 565 new riparian-wetland improvement projects.

• Maintained 642 existing riparian-wetland projects.

• Monitored 207 management plans with riparian-wetland objectives.

• Acquired 37 different tracts of land in eight states with riparian-wetland areas, primarily through land exchanges.

• Conducted 75 instream flow assessments to determine the water quantity needed to support healthy riparian-wetland areas.

• Managed many areas with riparian values through partnerships with Federal, State, and private cooperators.

• Completed numerous training, public outreach, and research efforts to promote awareness of the importance of healthy riparian-wetland areas.

In carrying out the Riparian-Wetland Initiative in FY 1995, the BLM coordinated its efforts with various agencies and parties, including the National Marine Fisheries Service, the U.S. Forest Service, the Fish and Wildlife Service, the Natural Resources Conservation Service, State and local agencies and State legislatures. The Bureau also worked closely with professional groups -- such as the American Fisheries Society and the Society for Range Management -- and with national environmental organizations.

BLM Accomplishments Through 1995

As a grand total through FY 1995, the BLM has assessed the functioning condition of riparian-wetland areas on 160,894 miles of streams and 12,798,979 acres of wetlands. That includes 28,561 miles of streams and 131,329 acres of wetlands in the contiguous Western States.

State-by-State Summary of the BLM's 1995 Accomplishments

Standing-water Wetland Inventory (by acres)

Alaska	43,885
Arizona	17,300
California	1,850
Colorado	527
Idaho	702
Montana	62
Nevada	2,172
New Mexico	110
Oregon/Wash	2,345
Utah	2,475
Wyoming	576
Total:	**72,004**

Flowing-water Riparian Inventory (by miles)

Alaska	99
Arizona	170
California	1,135
Colorado	1,597
Idaho	353
Montana	3,256
Nevada	364
New Mexico	35
Oregon/Wash.	753
Utah	379
Wyoming	673
Total:	**8,814**

Resource Activity Plans

Alaska	2
Arizona	5
California	11
Colorado	16
Idaho	51
Montana	12
Nevada	16
New Mexico	10
Oregon/Wash.	73
Utah	2
Wyoming	56
Total:	**254**

Resource Plans Monitored

Alaska	31
Arizona	16
California	6
Colorado	37
Idaho	6
Montana	32
Nevada	43
New Mexico	5
Oregon/Wash.	18
Utah	1
Wyoming	12
Total:	**207**

Riparian-Wetland Studies

Alaska	6
Arizona	45
California	66
Colorado	24
Idaho	235
Montana	686
Nevada	29
New Mexico	49
Oregon/Wash.	825
Utah	208
Wyoming	788
Total:	**2,961**

New Riparian-Wetland Projects

Alaska	1
Arizona	8
California	10
Colorado	85
Idaho	56
Montana	50
Nevada	27
New Mexico	29
Oregon/Wash.	49
Utah	32
Wyoming	218
Total:	**565**

Maintained Riparian-Wetland Projects

Alaska	0
Arizona	1
California	39
Colorado	34
Idaho	164
Montana	66
Nevada	120
New Mexico	21
Oregon/Wash.	66
Utah	67
Wyoming	64
Total:	**642**

Instream Flow Studies

Alaska	3
Arizona	18
California	0
Colorado	2
Idaho	3
Montana	7
Nevada	2
New Mexico	0
Oregon/Wash.	3
Utah	7
Wyoming	4
Total:	**49**

New Intensive Wetland (Lentic) Management Action Applied (by acres)

Alaska	0
Arizona	0
California	1,500
Colorado	772
Idaho	334
Montana	5
Nevada	224
New Mexico	382
Oregon/Wash.	455
Utah	2,877
Wyoming	720
Total:	**7,269**

New Intensive Riparian (Lotic) Management Action Applied (by miles)

Alaska	0
Arizona	37
California	0
Colorado	124
Idaho	247
Montana	54
Nevada	40
New Mexico	15
Oregon/Wash.	58
Utah	203
Wyoming	196
Total:	**974**

Riparian-Wetland Acquisitions/Easements (by tract)

Alaska	0
Arizona	2
California	3
Colorado	7
Idaho	6
Montana	0
Nevada	2
New Mexico	2
Oregon/Wash.	11
Utah	2
Wyoming	2
Total:	**37**

Goals and Strategies

Below are the goals of the BLM's *Riparian-Wetland Initiative for the 1990's*, and the agency's progress toward reaching those goals, for fiscal year 1995.

Goal 1

The BLM is working to restore and maintain riparian-wetland areas so that at least 75 percent are in proper functioning condition by 1997. Overall, the agency is working to get riparian zones into an advanced or desired ecological state.

The BLM is implementing strategies in different stages. For example, in those areas where plans are completed, the agency is developing projects. In other areas, the Bureau is conducting inventories to gather baseline data, which facilitates planning and project design. Where plans have been implemented, the BLM is conducting monitoring to determine the extent to which it is meeting riparian-wetland management objectives. To move toward its restoration and maintenance goals, the BLM employs a variety of strategies.

Inventory and Classification

The BLM is compiling and evaluating baseline information to determine ecological status, potential, and condition. Please see **Appendix I** for numerous examples.

Land Use and Activity Plan Preparation or Revision

The BLM has been developing or revising management plans that involve riparian-wetland areas or values.

• In 1995, the agency prepared or revised 254 activity plans that addressed riparian-wetland issues (e.g., Allotment Management Plans, Watershed Management Plans, Habitat Management Plans, Coordinated Resource Management Plans, and Recreation Management Plans). These activity plans contributed to the BLM's application of intensive management to 974 miles of streams and 7,269 acres of wetlands in the contiguous Western States. Activity plans included land use-plan objectives and provided appropriate management prescriptions related to riparian-wetland area management, such as livestock grazing, surface protection, fish and wildlife habitat, and recreation use.

• The BLM is completing new or revising existing Resource Management Plans in order to resolve conflicts over riparian-wetland resources. As it does this, the agency determines the best mix of multiple uses that are consistent with existing regulations and management practices, such as the Healthy Rangelands strategy that took effect August 21, 1995, and Endangered Species Recovery Plans. Please see **Appendix II** for details on new or revised activity plans.

Project Development and Maintenance

The BLM initiates and maintains projects to create, improve, or maintain riparian-wetland ecological conditions. In 1995, the agency carried out 565 new on-site projects to protect, restore, or improve riparian-wetland areas. These projects included water developments; fence construction; tree, shrub, and grass plantings; prescribed burnings; and noxious weed control.

In 1995, the BLM, working with volunteers, land users, and various interest groups, maintained 642 existing riparian-wetland projects.

Monitoring

The BLM monitors riparian-wetland areas to determine whether management actions are meeting specific objectives. In 1995, the agency monitored management actions on 2,961 activity plans or sites.

When riparian objectives are not being met, the BLM revises management prescriptions and resumes monitoring to measure its progress toward management goals.

The *Riparian-Wetland Initiative for the 1990's* includes a directive to monitor water quality and to implement Best Management Practices to meet State and national water quality objectives. Please see **Appendix III** for details on monitoring progress.

Goal 2

The BLM protects riparian-wetland areas and associated uplands through proper land management and by avoiding or mitigating negative impacts. The objective is to protect, acquire, and expand key areas to ensure their efficient management and to bring about their maximum public benefit.

In order to protect or expand these areas, the agency is implementing several strategies, which are described below.

Protection and Mitigation

The BLM prevents or mitigates the negative effects of surface-disturbance activities to the maximum extent practical by completing Environmental Assessments (EAs) of proposed activities. The EA identifies impacts, alternatives, and mitigating measures for the proposed activity. Protective stipulations are incorporated in land-use authorizations and contracts to make sure that site-specific riparian-wetland management objectives are met. To ensure compliance with Section 404 of the Clean Water Act, the BLM coordinates permits with the Army Corps of Engineers, the Environmental Protection Agency, and the Fish and Wildlife Service, among other agencies.

The BLM ensured compliance with mitigation measures in 1995 for hundreds of surface-disturbing activities, such as road building, pipeline construction, mineral exploration and development, and recreation activities. Monitoring these activities to determine their success in mitigating impacts required several adjustments in land-use activities.

Special Designations

The BLM identifies critical or unique riparian-wetland areas that would benefit from special designation through land-use planning or other processes.

Types of special designations are Quality Management Areas (QMAs), National Riparian Conservation Areas, Areas of Critical Environmental Concern (ACEC), Research Natural Areas (RNAs), and Wilderness Study Areas (WSAs). The Bureau sometimes withdraws areas from certain types of entries or activities to protect riparian resources.

Please see **Appendix IV** for a list of riparian areas that were designated for special management emphasis in 1995.

Water Rights Assessments

Following the procedural requirements of various State laws, the BLM obtains on a case-by-case basis the rights or cooperative agreements for water needed to sustain riparian-wetland areas and their uses.

In 1995, the agency conducted 75 site-specific studies to determine water amounts, including instream flows, that are needed to support healthy riparian-wetland areas. Please see **Appendix V** for examples.

Acquisitions and Easements

The BLM acquires riparian-wetland areas primarily through exchanges, but also through donations, purchases, and easements. Key areas sought are those that are adjacent to Waterfowl Habitat Management Areas; those that provide habitat for threatened and endangered species; those that will enhance recreational fishing; and those that will enhance the management of larger blocks of surrounding public lands. For details on riparian-wetland areas that the BLM acquired in 1995, please see **Appendix VI**.

Watershed Approach

The BLM takes a watershed approach to riparian-wetland management that, whenever possible, focuses on entire watersheds and involves all affected landowners. Under this approach, the agency manages riparian-wetland areas in a manner that accommodates multiple uses. In certain instances, the BLM has to restrict some uses to achieve site-specific objectives. Please see **Appendix VII** for some examples of the BLM's watershed approach.

Goal 3

The BLM carries out a multifaceted riparian-wetland information and outreach program that includes training and research. The objective is to raise awareness and understanding of the importance of healthy riparian-wetland areas.

The BLM continues to expand training to ensure that agency employees have the technical and management skills needed for planning and program implementation. The BLM makes this training available to other government agencies and to the public. In 1995, the BLM conducted, sponsored, or co-sponsored numerous training sessions, workshops, and conferences. Please see **Appendix VIII** for details.

Public Outreach

As the BLM, the academic community, and other interested parties disseminate information about riparian-wetland areas, the public is becoming more aware of the value of these lands.

In 1995, the BLM continued its efforts to create a greater understanding of and appreciation for riparian-wetland areas among land managers, business and community leaders, and the general public. The agency expanded its public outreach program through media contact and coverage, brochures, exhibits, videos, and teaching material. The BLM presented this information at workshops, conferences, schools, and during tours, as noted in **Appendix IX**.

Showcase Areas and Awards

The BLM continues to showcase riparian-wetland areas where proper management is creating multiple benefits. The agency also honors individuals or groups that have made outstanding contributions in helping the BLM reach its riparian-wetland management objectives.

Riparian Showcases

Citing wetland quality and conservation management, the Intermountain Joint Venture Society selected the Chilly Slough in the Challis Resource Area of Idaho as a wetland demonstration area.

Riparian Awards to BLM

The Western Division of the American Fisheries Society sponsors an annual award for excellence in on-site riparian management. The award recognizes the best BLM and Forest Service work in restoring riparian areas. The Wyoming State Office, the Rock Springs (Wyoming) District, and the Bighorn Basin (Wyoming) Resource Area all received plaques in 1995 for their outstanding management of riparian areas.

BLM employees Fran Ackley and Royce Wheeler, both of the Canon City (Colorado) District, received the *Excellence in Riparian Management Award* from the Colorado Riparian Association. The BLMers were honored for their efforts in protecting and restoring riparian areas in the San Luis Valley of Colorado.

Goal 4

Riparian-wetland ecosystems, which neither begin nor end at land-ownership boundaries, require effective and cooperative management by all affected parties. The BLM is working to form new and maintain existing partnerships to implement the Riparian-Wetland Initiative for the 1990's. *The goal is to supplement and accelerate the agency's work by using non-Federal funds and labor to complete high-priority projects.*

Funding and Volunteer Opportunities

The BLM undertakes high-priority restoration projects through joint-funding ventures, such as the Challenge Cost Share Funding Program. Through its Volunteer Program, the agency seeks and receives assistance from individuals, public land users, and other groups concerned about riparian-wetland management. Volunteers not only help the BLM complete projects and perform required maintenance, but also educate the public about the value of riparian-wetland areas.

Please see **Appendix X** for examples of land users and groups in four States that volunteered time and labor to help the BLM on riparian-wetland projects.

Partnerships

The BLM continued working in 1995 with a variety of private groups and governmental agencies to achieve riparian-wetland management objectives. Please see **Appendix XI** for numerous examples of partnerships, interagency cooperation, and interdisciplinary coordination.

Standardization and Integration

To carry out its land-management mission more effectively, the BLM coordinates its riparian-related work with other BLM initiatives, including those dealing with fish and wildlife and recreation.

Technical Guidelines

The BLM's National Applied Resource Sciences Center in Denver continues to take the lead role in the agency's development and implementation of standardized riparian-wetland guidelines. The guidelines relate to inventory, classification, management, monitoring, evaluation, and data handling. The following are the riparian management technical references that became available during the period 1984-1994.

- Concepts in Stream Riparian Rehabilitation, 1986
- A Selected, Annotated Bibliography of Riparian Area Management, 1987
- The Use of Aerial Photography to Inventory and Monitor Riparian Areas, 1987
- Inventory and Monitoring of Riparian Areas, 1989
- Grazing Management in Riparian Areas, 1989
- Riparian-Wetland Classification Review, 1991
- Procedures for Ecological Site Inventory, 1992
- Management Techniques in Riparian Areas, 1992
- Greenline Riparian-Wetland Monitoring, 1993
- Process for Assessing Proper Functioning Condition, 1993
- Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas, 1994
- The Use of Aerial Photographs to Manage Riparian-Wetland Areas, 1994

In 1995, the University of Montana, with the support of the Montana Riparian-Wetland Association and Montana BLM, published a guide on the *Classification and Management of Montana's Riparian and Wetland Sites.*

Conclusion

The BLM's Healthy Rangelands strategy, which took effect on August 21, 1995, recognizes the importance of restoring or maintaining the health of riparian-wetland areas. The strategy is aimed at restoring to health about 100,000 acres of riparian habitat and bringing 20 million acres of upland habitat into proper functioning condition. Thus, the Healthy Rangelands strategy advances the principal goal of the *Riparian-Wetland Initiative for the 1990's*, which is to restore to proper functioning condition at least 75 percent of the riparian-wetland areas on public lands by 1997.

Achieving this objective and responding to the other challenges described in this report will require the continued support of Congress and ongoing cooperation between the BLM and its numerous public and private partners. With that support and cooperation, the Bureau of Land Management can achieve healthy conditions on riparian-wetland areas throughout the West.

Appendices

APPENDIX I:
BASELINE INFORMATION COLLECTION

• In Alaska's Northern District, the BLM inventoried 17 miles of streams while the agency's Anchorage District conducted a habitat evaluation of the 35,000-acre Carter Spit Complex. Riparian inventory assessments conducted in the Gulkana Wild River Corridor for FY '95 amounted to 99 miles of stream and 43,885 acres of wetland.

• In Arizona, the BLM conducted 170 miles of proper functioning condition assessments on the Virgin, Gila, Hassayampa, and Colorado Rivers. The Bureau also completed proper functioning conditioning assessments on 17,300 acres of wetland along the Gila and Colorado Rivers.

• In California, the Bureau completed three watershed analyses and carried out proper functioning condition assessments on 1,135 miles of streams. The BLM also finished proper functioning condition assessments on 1,850 acres of wetlands. This work was done in the Surprise Valley Hydrologic Unit, North Lahontan River, and the watersheds of East Walker River, Mono Lake, and the Owens River.

• In Colorado, the BLM completed inventories on 1,597 riparian stream miles and 527 acres of wetlands. This included intensive inventories on 486 riparian stream miles to determine condition and management needs; 200 miles of aerial photo and mapping inventory; riparian classification and evaluation of 678 miles and 50 acres for assessment of proper functioning condition; and 150 miles of remote sensing for assessment of Arkansas water needs.

• In Idaho, the BLM, the Montana Riparian Association, and private contractors inventoried 353 miles of streams. At Henry's Lake, 640 acres of riparian-wetland habitat were inventoried.

• In Montana, the Bureau conducted 3,256 miles of riparian inventory assessment and inventoried an additional 4,047 miles of drainages that did not meet riparian-wetland criteria. The BLM inventoried another 62 acres of wetlands consisting mostly of waterfowl reservoirs and lakes.

• In Nevada, the Bureau conducted intensive stream surveys on 13 streams encompassing 61 miles and determined riparian functionality for 30 streams encompassing 64 miles. In the Winnemucca District, the BLM installed thermographs to record water temperatures along 158 miles of streams. In partnership with Barrick Goldstrike Mining, Inc., the agency also completed riparian classification of 80 miles of the Maggie Creek and Rock Creek watersheds in the Elko District. The BLM assessed 2,172 acres of still-water wetland habitat for functioning condition.

Baseline Information Collection [continued]

• In New Mexico, the BLM conducted riparian inventory assessments along 35 miles of streams and on 110 acres of wetlands.

• In Oregon and Washington, the Bureau carried out riparian inventory assessments along 753 miles of streams and on 2,345 acres of wetlands. The Spokane District's Salmon Summit Team completed watershed assessments on more than 30 allotments over a wide geographical area on the east side of the Cascades.

• In Utah, the BLM conducted proper functioning condition assessments on riparian areas along 379 miles of streams, as well as installed green-line transects on certain streams in all Districts. The Bureau completed riparian inventory on 2,475 acres of wetlands, ranging from small wet meadows to those associated with lakes and reservoirs.

• In Wyoming, the BLM carried out proper functioning condition assessments on 673 miles of streams on public lands; it also helped inventory another 30 miles of State and private riparian habitats. The Bureau completed proper functioning condition assessments on 576 acres of public land wetlands while helping to inventory another 380 acres of State and private riparian wetlands.

APPENDIX II:
LAND USE AND ACTIVITY PLAN PREPARATION or REVISION

• In Alaska's Northern District, the BLM began implementing two plans for managing the Hogatza River Area of Critical Environmental Concern (ACEC) and the Indian River ACEC. Both of these ACECs, which are important for chum salmon production, have high riparian values. The BLM is using a team of specialists in managing the Hogatza River ACEC, the potential site for a gold placer mining operation.

• In Arizona, the BLM's District Offices prepared five activity plans, including the Gila Box Riparian National Conservation Area Management Plan, the Muleshoe Ecosystem Management Plan, and the Agua Fria Grasslands Ecosystem Plan. The offices also evaluated the Artillery and Valentine allotments and subsequently reached agreements with users and interested parties to improve riparian conditions.

• In California, the BLM's District Offices completed 11 new activity plans. They included the Mattole Estuary Plan, the Cache Creek Coordinated Resource Management Plan, and a plan for the Dos Palmas Area of Critical Environmental Concern.

Land Use and Activity Plan Preparation or Revision [continued]

• In Colorado, the BLM completed or revised activity plans for 15 areas and one Resource Management Plan. The plans completed were those for the Evacuation Creek Allotment, the 7110 Allotment Management Plan, the Powderhorn Wilderness Plan, the Sage Grouse Management Plan, the Dry Creek Basin Coordinated Resource Management Plan, the Blanc Interagency Plan, and the Gunnison Bluff and Colorado River Plans. The Bureau revised six activity plans to include riparian objectives and management guidelines.

• In Idaho, the BLM's District Offices completed 51 activity plans. In the Big Butte Resource Area, the Bureau completed new management plans on two allotments associated with the Bull Trout Conservation Strategy. The Monument Resource Area staff began a management plan for the River Wood Ranch Acquisition. In the Challis Resource Area, the BLM completed grazing management plans on 30 allotments associated with salmon recovery while the Lemhi Resource Area developed such plans for 17 salmon recovery-related allotments.

• In Montana, the BLM completed 12 activity plans, including Allotment Management Plans, Habitat Management Plans, Coordinated Resource Management Plans, and a five-year Waterfowl Management Strategy Plan.

• In Nevada, the Bureau issued 16 activity plans or multiple-use decisions that included riparian objectives.

• In New Mexico, the BLM completed 10 activity plans that included riparian objectives and management guidelines.

• The BLM's Oregon/Washington Districts completed or revised 73 activity plans, including Watershed Analysis Plans that involved participation by several agencies, landowners, and interested parties. The Burns District updated their District Wetland Habitat Management Plan while the Prineville District evaluated 53 grazing allotments with riparian habitat values.

• The BLM's Moab (Utah) District completed an extensive Riparian Management Plan analysis and modification for the Grand Resource Area. Subsequent land-use decisions, which affected 163 miles of riparian habitat along rivers, resulted in a reallocation of available forage from livestock to wildlife. The Moab District also completed the San Rafael Canyon Habitat Plan, which sets use limits within the riparian zone along eight miles of the San Rafael River.

• The BLM's Wyoming District Offices completed or revised 56 activity plans to include riparian management objectives.

APPENDIX III:
MONITORING PROGRESS

• In Alaska, the BLM monitored six Wild and Scenic Rivers to ensure maintenance of desired resource conditions. The Bureau also conducted monitoring studies on the Carter Spit's riparian habitat and monitored instream flows on the Delta, Beaver, and Birch Wild and Scenic Rivers.

• In Arizona, the BLM monitored 45 study areas to determine instream flow needs, collected groundwater baseline information, and gathered information on endangered species. The Bureau monitored 16 plans with riparian objectives, including Allotment, Habitat, Watershed, Recreation, and Ecosystem Management Plans.

• In California, the Bureau monitored 11 activity plans and 66 site-specific studies with riparian objectives in order to determine the effectiveness of management actions.

• In Colorado, the BLM monitored 37 plans with riparian objectives and completed 24 riparian-related studies. The monitoring related to studies of photo plots, water quality, macro-invertebrates, stream cross-sections, vegetation trends, waterfowl nest searches, recreation impacts, soil organisms, land health, beaver distribution, neotropical birds, and livestock use. Much of the monitoring was aimed at determining the BLM's success in meeting riparian objectives contained in various activity plans.

• In Idaho, the BLM monitored six activity plans with riparian objectives on Big Canyon Creek, Lolo Creek, Little Salmon River, Thorn Creek, and the Lemhi and Challis Resource Areas. The Bureau completed monitoring plans for each of the Resource Areas. Monitoring of riparian areas and their associated aquatic systems continues to be a high priority in Idaho, as evidenced by the fact that the BLM completed 235 riparian-related studies.

Monitoring Progress [continued]

• In Montana, the BLM monitored 32 activity plans with riparian objectives and completed 686 monitoring studies that included creeks, springs, Allotment Management Plans, two stream rehabilitation projects, and studies on the Wild and Scenic Missouri River.

• In Nevada, the BLM monitored 43 activity plans that included riparian habitat and completed 29 monitoring studies on other areas with riparian habitat.

• In New Mexico, the Bureau developed five monitoring plans and collected information from 49 studies relating to riparian habitat.

• In Oregon and Washington, the BLM developed, updated, or monitored 18 plans with riparian objectives. The Bureau also completed 825 site-specific studies.

• In Utah, the BLM developed the San Rafael River Monitoring plan in cooperation with livestock permittees. The Bureau completed 208 monitoring studies relating to vegetative sampling, water quality samples and analysis, macro-invertebrate samples, photopoint retakes, stream gauge readings, and the establishment of observation exclosures. In addition, the BLM installed and monitored observation wells to determine ground water levels along the Fremont River, Greenwich Creek, and Birch Creek.

• In Wyoming, the Bureau developed, updated, or monitored 12 plans with riparian objectives. The BLM also monitored 788 site-specific studies dealing with macro-invertebrates, photo point/utilization transects, stream cross-sections, water quality, and vegetative regrowth.

APPENDIX IV:
SPECIAL DESIGNATIONS

State	District	Special Designation	Project Area
Alaska	Northern	ACEC*	Hogatza River
Alaska	Northern	ACEC*	Indian River
Colorado	Junction	Withdrawal	Ruby Mineral Withdrawal
Colorado	Junction	Withdrawal	Horse Thief Mineral Withdrawal

* Area of Critical Environmental Concern

APPENDIX V:
INSTREAM FLOW ASSESSMENTS AND STUDIES

• Alaska's Anchorage District is analyzing data from its instream flow assessment of the Unalakleet River. Documentation continues on instream flow needs to protect water rights and riparian values on Birch Creek, Delta River, Fortymile River, Unalakleet River, Gulkana River, and Beaver Creek.

• Arizona District Offices continue to do instream flow assessments on Beaver Dam Wash; the Gila, San Francisco, Babocomari, Big Sandy, and Bill Williams Rivers; the Bonita, Redfield, Francis, Burro, Bass, Wildcat, Mescal, Apache, Wright, and Cienega Creeks; and Hot Springs Canyon.

• In Colorado, the BLM filed for water rights on 104 springs and reservoirs. The agency also filed nine oppositions to private water rights applications in order to protect riparian values.

• Also in Colorado, the BLM carried out surveys to establish instream flow water rights on Piceance and Black Sulfur Creeks in the Craig District; on Red Dirt, King, and Cattle Creeks in the Grand Junction District; on Eight Mile and Bernard Creeks in the Canon City District; and on Roc, LaSal, mainstem Mesa, South Fork Mesa, North Fork Mesa, Cottonwood, Specie, Deer Beaver, Rock Monument, West Fork Antelope, South Beaver, East Fork Little Blue, Little Blue, Devil's, Alpine Gulch, and Razor Creeks in the Montrose District.

• In Idaho, the BLM completed instream flow assessments for Wet Creek and Badger Creek in the Big Butte Resource Area and for Gamlin Lake in the Emerald Empire Resource Area.

Instream Flow Assessments and Studies [continued]

• In Montana, the Bureau completed six instream flow assessments in the western part of the state. The agency also finished one in South Dakota.

• In Nevada's Ely District, the BLM recorded instream flow measurements for 75 springs in order to document water-based grazing privileges. To support riparian and aquatic resource values, the Las Vegas District continued to determine instream flow requirements along nine miles of the Virgin River.

• In Oregon, the Bureau's Coos Bay District collected information from the New River Instream Flow Study, which it is conducting in cooperation with Oregon's Department of Fish and Wildlife and Oregon's Water Resources Research Institute. The Salem District is carrying out an instream structure flow study in the East Fork of Lobster Creek, and the Burns District has done an initial fish micro-habitat utilization study on the Little Blitzen River. The Vale District reviewed water rights on 296 sources and the Burns District filed applications for six new water rights.

• In Utah, the BLM continued its instream flow assessment for the Virgin River, which is to be completed in FY 1996. The project has been a major effort involving BLM offices in Arizona, Nevada, and Utah. The BLM initiated or completed other instream flow studies on Donner and Bettridge Creeks in the Salt Lake District; on Greenwich Creek, the Fremont River, and Pine Creek in the Richfield District; and on Grassy Trail Creek in the Moab District. Utah's District Offices have been assessing opportunities, under State law, for developing and protecting water rights necessary to support dependent natural resources.

• In Wyoming, the BLM worked with the State's Game and Fish Department on instream flow assessments and studies on four sites.

APPENDIX VI:
KEY RIPARIAN-WETLAND ACQUISITIONS

State	Acquisition/Easement Description
Arizona	Acquired two parcels of land totaling 921 acres that contain riparian areas within the San Pedro Riparian National Conservation Area.
California	Acquired Indian Springs, four miles of Fiske Creek, and three miles along the Sacramento River.
Colorado	In the Service Mountain Exchange, the Craig District acquired 7.5 miles of small perennial streams. In the Grande River Exchange, the BLM acquired seven miles of stream in Lost and Mule Creeks. The Canyon City District obtained a half mile of Grape Creek in the Grape Creek Purchase and a half mile of San Juan Creek in the Davidson Ranch Purchase.

Key Riparian-Wetland Acquisitions [continued]

State	Acquisition/Easement Description
Colorado	The Grand Junction District obtained two miles of riparian habitat along the Colorado River in the Hawxhurst Ranch Exchange and three miles along the Crystal River in the Crystal River Ranch Exchange. The Bureau also obtained 295 acres of wetlands adjacent to the Colorado River in the Gore Property Ranch Purchase.
Idaho	The Shoshone District acquired the 2,242-acre River Wood Ranch from the Farmers Home Administration. The parcel contains 6.5 miles of the Little Wood River and significant riparian areas. The Idaho Falls District obtained 75 acres, including 4.5 acres of riparian habitat, from the Farmers Home Administration. The Coeur d'Alene District acquired the 10,000-acre China Garden Ranch, which contains riparian habitat. The District also obtained an additional 1,200 acres by means of a conservation easement. The easement will allow the BLM to install water wells in Big Creek for a riparian study. The Salmon District acquired 80 acres in Chilly Slough through a purchase and exchange.
Nevada	The Elko District completed the South Fork of the Humboldt River-Barrick Gold Co. Land Exchange, which includes 1.5 mile of riparian and aquatic habitat. In the Las Vegas District, the Bureau completed a land exchange with Olympic Management, Inc., involving several scattered parcels along the Virgin River that contain 640 acres of riparian habitat.
New Mexico	The BLM completed two acquisitions along the Delaware and Rio Bonito Rivers.
Oregon/Washington	The Coos Bay District carried out five land acquisitions that include 31 acres of riparian habitat. Part of this acreage is located along the New and Lost Lakes. The Spokane District conducted five land exchanges that include riparian-wetland habitat. One of the exchanges resulted in the BLM's acquisition of 3.5 miles of streams and 981 acres of wetland habitat in the Twin Lakes area. The Medford District acquired the Box O Ranch, which includes lands along Jenny Creek. The Eugene District had two acquisitions in the West Eugene Wetlands of 53 acres and 32 acres.

Key Riparian-Wetland Acquisitions [continued]

State	Acquisition/Easement Description
Utah	The BLM completed two land exchanges that have added three miles of riparian stream habitat in the Oquirrh Mountains of Tooele County and one mile in the Manti Range of Sevier County.
Wyoming	The Bureau completed one land exchange and one easement that contained riparian habitat.

APPENDIX VII: WATERSHED MANAGEMENT EXAMPLES

• The Northern District in Alaska began implementing two plans managing the Hogatza River Area of Critical Environmental Concern (ACEC) and the Indian River ACEC. Both of these areas have high riparian values; the Hogatza River ACEC also has potential for a gold placer mining operation. The BLM is gathering baseline data in anticipation of mining activities.

• In Arizona, the BLM worked with other agencies and private groups in preparing the Gila Box Riparian National Conservation Area Management Plan, the Muleshoe Ecosystem Management Plan, and the Fria Grasslands Ecosystem Management Plan.

• In California, the BLM managed riparian habitats by developing the Mattole Estuary Plan, the Cache Creek Coordinated Resource Management Plan, and the Dos Palmas Area of Critical Environmental Concern.

• In Colorado, the BLM's Craig and Montrose Districts worked with landowners through the Owl Mountain Partnership and the San Miguel Ecosystem Partnership, respectively, to improve watershed conditions. The Canon City District continued its riparian management efforts on Badger Creek, Grape Creek, the Rio Grande River, 4 Mile Creek, and other riparian areas that extend beyond BLM borders.

• In Montana, the Bureau worked with the Montana Riparian Association on improving watershed planning and inventory methods.

• In Idaho, the Bruneau and Owyhee Resource Areas' interdisciplinary team evaluated watershed conditions to assess the impact of grazing and other land uses in Shoofly Creek, Little Jacks Creek, Big Jacks Creek, the North Fork Owyhee River, and the Red Canyon Creek Watershed.

• Also in Idaho, the Cascade Resource Area participated in the Payette River Basin Watershed Study, which is headed by Idaho's Department of Water Resources. The area's interdisciplinary team is evaluating riparian-wetland areas in the Big Willow Creek drainage. The Lemhi and Challis Resource Areas participated in the model Lemhi Watershed effort to promote salmon recovery in the Snake River and improve aquatic habitat. Also, the Lemhi Resource Area is taking a coordinated resource management approach as it builds partnerships to improve watershed functions.

Watershed Management Examples [continued]

• In Oregon/Washington, the BLM completed watershed analyses on 23 percent of the BLM-administered lands in western Oregon.

• In Utah, the Richfield District continues to participate with several Federal, State, and local agencies and private landowners in implementing the Otter Creek Coordinated Resource Management Plan. The plan, which covers 240,000 acres in Sevier and Piute Counties, includes management projects benefiting watersheds, recreation activities, wildlife, and riparian areas.

• In Wyoming, the Little Snake River Conservation District received a Director's Riparian Stewardship Award. Also, the Great Divide Resource Area continued its work on developing the Upper Muddy Creek Watershed project. The Resource Area is working with the Conservation District, the Wyoming Game and Fish Department, the Wildlife Management Institute, the U.S. Fish and Wildlife Foundation and grazing permittees.

• Also in Wyoming, the Rock Springs District and its partners worked together in the Little Mountain project area to place cut or fallen trees in Current Creek and to complete prescribed burns in the uplands. The objective is to enhance Colorado River cutthroat trout habitat. The BLM's partners in this effort are Wyoming's Game and Fish Department, Rocky Mountain Elk Foundation, the Fish and Wildlife Foundation, and local permittees. Also, as part of the Bear River Divide Coordinated Resource Management Plan, the Rock Springs District -- joined by the Bear Lake Regional Commission for Water Quality and grazing lessees -- rebuilt a number of reservoirs to reduce silt and improve water quality. The District completed prescribed upland burns to enhance grass growth in order to draw away wildlife and livestock from riparian-wetland areas.

APPENDIX VIII: EXAMPLES OF TRAINING SESSIONS AND WORKSHOPS

• The BLM's National Applied Resource Sciences Center (NARSC) staff in Denver conducted 22 training sessions for 35 BLM field offices in eight states to assist in using the technical reference titled "Process for Assessing Proper Functioning Condition" in riparian areas. Among those attending the sessions, besides BLM employees, were representatives of other Federal agencies, State agencies, conservation groups, ranchers, and various public land user groups.

• The BLM's National Training Center in Phoenix taught two courses in riparian management. One, titled "Riparian Management," took place in Salem, Oregon; the other, called "Riparian-Wetland Ecological Site Inventory," was held in Rock Springs, Wyoming.

• In Arizona, the BLM conducted an "Assessing Proper Functioning Condition" training course for District Office employees, along with representatives of other Federal agencies and State agencies.

Examples of Training Sessions and Workshops [continued]

• The Colorado State Office and the Environmental Protection Agency teamed up to enable 10 BLMers to attend a course called "Applied Fluvial Geomorphology." Also, the Grand Junction District sponsored the National Training Center's "Applied Biodiversity Conservation" course, which was attended by BLM employees and representatives of BLM partnership groups. In addition, the NARSC and Colorado State Office hosted a course on "Assessing Proper Functioning Condition" for the Colorado Department of Wildlife, the Forest Service, and BLM field staffers in Glenwood Springs. The BLM also presented the course to the Colorado Cattlemen's Association and the Colorado Riparian Association.

• In Idaho, the Lower Snake River District sponsored a one-day field trip to identify riparian species found in southwestern Idaho. Other riparian-related activities: the Lemhi Resource Area taught riparian functionality through the Lemhi County Winter School; the Challis Resource Area staff provided training on riparian monitoring to the Yankee Fork Ranger District and representatives of the Shoshone-Bannock Tribe; and the Medicine Lodge Resource Area staff participated in the Northwest Regional Riparian Symposium.

• In Montana, the BLM conducted training sessions on the Statewide riparian classification system, held one workshop on riparian inventory procedures, and presented two technical sessions on riparian management and inventory.

• In New Mexico, the BLM's NARSC staff conducted one riparian-related training session for BLM employees.

• In Nevada, the BLM's NARSC staff held its "Assessing Proper Functioning Condition" course in Elko, Caliente, Ely, and Winnemucca.

• In Oregon/Washington, the Bureau's NARSC staff conducted four "Assessing Proper Functioning Condition" courses for BLM and Forest Service employees.

• The Wyoming State Office and the BLM's NARSC staff conducted five classes in Wyoming on "Assessing Proper Functioning Condition." The classes were for BLM employees, ranchers, and the Wyoming Riparian Association.

APPENDIX IX:
EXAMPLES OF OUTREACH EFFORTS

• At the Campbell Tract in Alaska, more than 2,500 sixth-grade students participated in the 21st Annual Outdoor Week, which was hosted by the BLM's Anchorage District.

• The Northern District in Alaska co-hosted Outdoor Days in Fairbanks, where more than 800 sixth-grade students from 12 schools visited with resource specialists over a three-day period.

• In Arizona, the BLM gave 20 presentations on the importance of riparian areas to school classes and recreation user groups.

Examples of Outreach Efforts [continued]

• In California, the BLM helped conduct an environmental education program in Sand Canyon for about 600 sixth-graders from the Indian Wells Valley. In addition, another 300 to 400 students received environmental education programs at various schools and at Short Canyon.

• In Colorado's Craig District employees assisted in producing the Northwest Colorado Riparian Task Force Newsletter. Elsewhere in Colorado, the Montrose District conducted a field trip to riparian management areas with an ecology class from Rocky Mountain Biological Laboratory. The Grand Junction District participated in classroom and field presentations for the Boy Scouts, Trout Unlimited, and other groups. The District also helped the Colorado Riparian Association fund a "River Dynamics Trailer" for use with schools and others to demonstrate river dynamics. The Colorado State Office co-sponsored the Colorado Riparian Association Conference in Frisco.

• In Idaho, the Medicine Lodge Resource Area gave field tours to Idaho's Department of Fish and Game and the South Fork Watershed Council. On the tours, participants discussed river riparian function, inventory, and cottonwood ecology research.

• Also in Idaho, the Big Butte Resource Area Office made numerous riparian presentations to schools, local service clubs, and youth groups. The office also gave a field tour of the Sawmill Creek Riparian Showcase Area to Natural Resources Conservation Service, ranchers, water users, and local elected officials.

• In Idaho, the Challis and Lemhi Resource Areas conducted field tours for BLM officials, the National Wildlife Federation, and various news media -- ABC News, Newsweek Magazine, MacNeil/Lehrer News Hour, Dateline NBC, the New York Times, and Idaho Public Television.

• In Montana, the BLM participated in grade-school field days, a Statewide riparian classification project, and a riparian workshop. The Bureau also gave presentations on riparian inventory procedures to agency employees and outside groups.

• In Nevada, Elko District employees conducted the Spring Creek Elementary School Riparian Field/Tree Planting Trip. They also gave lectures on riparian ecosystems at the Western Nevada Community College.

• Also in Nevada, the Winnemucca District held a Kids' Fishing Day at Sonoma Creek and participated in the Ecology Days Educational Program for fourth- and fifth-grade students. The Elko District staff helped develop a Lahontan cutthroat trout brochure in cooperation with the Forest Service, U.S. Fish and Wildlife Service, Nevada Division of Wildlife, and Trout Unlimited.

• In Wyoming, the Pinedale Resource Area, working with the Safari Club International's Wilderness Leadership School, gave presentations about the BLM to about 120 school teachers, most of them from the East. Also, the Pinedale Resource Area, with the help of volunteers from three chapters of Trout Unlimited, completed extensive reconstruction of riparian exclosures. The Oakbrook (Chicago) chapter received the BLM Director's Riparian Stewardship Award for their continuous role in this three-year project.

Examples of Outreach Efforts [continued]

• Also in Wyoming, the Cody Resource Area participated in a cleanup of the Shoshone River. Jacque Robinson, a national BLM Volunteer of the Year award winner who works with the county court system in Cody, coordinated riparian cleanup work carried out by adult and youth offenders who are doing community service time.

• The Bighorn Basin (Wyoming) Resource Area worked with Manderson Elementary School in an adopt-a-wetland project. The students helped release a biological control agent on a type of weed -- Russian Napweed -- that is invading riparian areas. The school will monitor the success of the efforts on a BLM tract along the Big Horn River. Also in Wyoming, the Platte River Resource Area conducted "field classrooms" along Bolton Creek with more than 100 students over a three-day period. The classrooms explained the importance of riparian areas.

APPENDIX X: EXAMPLES OF FUNDING AND VOLUNTEER EFFORTS

State	Office	Project Area(s)/ Activity	Funding/Volunteer Source
Colorado	Craig	Fortification Creek (willow plantings)	Boy Scouts
Colorado	Craig	Deer Creek (willow plantings)	Colorado Department of Wildlife, BLM Colorado State Office, 4-H Club, U.S. Fish and Wildlife Service
Colorado	Craig	Brush and Dry Fork Creeks (willow plantings)	High school students
Colorado	Grand Junction	Trapper Creek	Trout Unlimited
Idaho	Salmon	Chilly Slough	The Nature Conservancy, Ducks Unlimited, Idaho Department of Fish and Game, and North American Wetland Conservation Council
Idaho	Salmon	Lemhi County	Youth Employment Program
Idaho	Idaho Falls	South Fork of Snake River (cottonwood study)	The Nature Conservancy, Montana Riparian Association
Idaho	Idaho Falls	South Fork of Snake River Forest Service (riparian inventory)	University of Montana

Examples of Funding and Volunteer Efforts [continued]

State	Office	Project Area(s)/ Activity	Funding/Volunteer Source
Idaho	Idaho Falls	South Fork of Snake River, Henry's Fork, Main Snake, (riparian inventory)	Forest Service, counties, Natural Resource Conservation Service, outfitters, canal companies, The Nature Conservancy, and local citizens
Utah	Richfield	Otter Creek (willow plantings)	Boy Scouts
Utah	Richfield	Fence construction	Utah State University , West Desert High School
Utah	Salt Lake	Laketown Canyon Creek, Rich County (weed eradication)	Boys Ranch
Utah	Cedar City	Fence construction	Utah Valley Community College
Utah	Price	Cottonwood and willow plantings	Future Farmers of America
Wyoming	Pinedale	Rock Creek (exclosures)	Three chapters of Trout Unlimited, Wyoming Game and Fish Department
Wyoming	Great Divide	Muddy Creek (fish barrier)	Wyoming Game and Fish Department, Fish and Wildlife Foundation

APPENDIX XI: MAJOR RIPARIAN-WETLAND PARTNERSHIPS AND INTERAGENCY AND INTERDISCIPLINARY COORDINATION

• Alaska's Northern District joined with Alaska's Department of Fish and Game and the U.S. Fish and Wildlife Service in building and maintaining a viewing platform and information display at Safety Sound.

• In Alaska, the BLM made a prototype of the core set of modules for the Alaska Aquatic Resource Information Management System. The information includes habitat inventory, channel morphology, channel profile, flow, fish population, and escapement.

Partnerships and Coordination [continued]

• Also in Alaska, the BLM continued two major projects to provide land cover mapping. The mapping projects, which involve Ducks Unlimited and other partners, deal with the National Petroleum Reserve-Alaska in the Northern District and the Bering Glacier area in the Glennallen District. The BLM undertook a new land cover project in FY 1995 in cooperation with the U.S. Air Force. The project will provide digital satellite land cover for about six million acres. Other cooperators are Ducks Unlimited, Alaska's Department of Fish and Game, Pacific Meridian Resources, and the University of Alaska.

• In California, the BLM is working with several groups to improve the American River Watershed. The BLM's partners are the American River Nature Center, the California Conservation Corps, the California Conservation Camp, and Eco-Americas. The work is aimed at maintaining native trees that were planted to restore riparian habitat along the American River near Coloma, California.

• Also in California, the BLM is working with The Nature Conservancy, Ducks Unlimited, California's Department Fish and Game, and Sacramento County in managing wetlands and the Visitors Center at Cosumnes River Preserve.

• The Bakersfield District and the Natural Resources Conservation Service are working on riparian ecological site classification in the East Walker River, Bridgeport Valley, and 9-Mile watersheds. The Bakersfield District is also cooperating with the California Exotic Pest Plant Council, the California Native Plant Society, and California's Department of Forestry on controlling and removing tamarisk in the Owens Valley basin.

• In Colorado and Wyoming, the BLM is serving on an interagency Rocky Mountain Riparian Coordinating Team. The purpose of the team, which includes the Forest Service and the Natural Resources Conservation Service, is to improve communication and coordination among Federal agencies. This will enable them to do a better job of managing riparian areas in Colorado, Wyoming, Nebraska, Kansas, and South Dakota.

• In Colorado, the BLM, the Colorado Natural Heritage Program, and other organizations are developing a Statewide riparian community classification system.

• Also in Colorado, the BLM and more than 30 local agencies and organizations have developed the Grand Mesa Slopes Special Management Area Plan, which involves combining the management of several watersheds, including two that are used for municipal water supplies. The plan is aimed at protecting scenic values, riparian areas, wildlife habitat, big game winter range, and watersheds while also ensuring livestock use and recreational opportunities.

• In Idaho, the BLM's Salmon District Office is working with numerous partners on the Chilly Slough Wetland Demonstration Area. The partners are The Nature Conservancy, Idaho's Department of Fish and Game, Ducks Unlimited, the Rocky Mountain Elk Foundation, and the North American Wetland Conservation Council.

• The Lemhi Resource Area in Salmon, Idaho, joined with Lemhi County and numerous other partners in developing a Riparian Conservation Agreement to improve riparian areas in Lemhi County.

Partnerships and Coordination [continued]

• The BLM's Idaho Falls District Office assisted the Adopt-a-Wetland Program in the South Fork and Henry's Fork of the Snake River. The office worked with Idaho's Department of Fish and Game, sportsmen and conservation groups in picking up litter, repairing riparian fences, and maintaining nest boxes in riparian areas. Other Idaho activities: the BLM's Medicine Lodge Resource Area joined with the Forest Service, the Idaho Department of Fish and Game, and Trout Unlimited to improve fish passage and riparian habitat on Rainey Creek. The Bureau's Lower Snake River District worked with the Idaho Department of Fish and Game and Ducks Unlimited at the Ted Trueblood Wildlife Management Area.

• In Montana, the BLM, as a member of the Montana Riparian and Wetland Association, gave technical and financial support for the publication of the handbook on classifying and managing Montana's riparian and wetland sites.

• In Utah, the BLM's Salt Lake District undertook an effort to improve and increase the size of wetland areas at Salt Wells (north shore of Great Salt Lake) by diking and moving water to previously dry mud flats. This project will expand open water habitat for ducks and geese and increase the food supply for the many shore birds that inhabit the Great Salt Lake. The BLM is carrying out this multi-year project with the Utah Division of Wildlife Resources.

• Also in Utah, the Richfield District is working with several Federal, State, and local agencies and private landowners to implement the Otter Creek Coordinated Resource Management Plan, which covers 240,000 acres in Sevier and Piute Counties. The Richfield District also formed a partnership with Millard County, the Utah State University Extension Service, the Fish and Wildlife Service, and private land owners in an effort to eradicate purple loosestrife, a noxious weed, from riparian wetland areas within the county.

• In Wyoming, the BLM completed and began implementing the Horse Creek Study Area plan. The Bureau, with help from the Rocky Mountain Elk Foundation and the Wyoming Game and Fish Department, initiated prescribed burns and grazing management agreements with grazing lessees.

• The Bighorn Basin (Wyoming) Resource Area, in cooperation with Washakie County Conservation District, is working on ways to reduce non-point source pollution. Other partners in this effort are local irrigators, the Wyoming Game and Fish Department, and the Natural Resource Conservation Service.

• The Platte River (Wyoming) Resource Area has been making progress on the Garrett Allotment Management Plan and the Buffalo Creek Coordinated Resource Management Plan. The BLM's rangeland, wildlife, and riparian specialists are working with grazing lessees and the Wyoming Game and Fish Department to assess whether current management is improving rangeland and riparian conditions.

• In Wyoming's Rock Springs District, the BLM, local ranchers, and Ducks Unlimited have joined forces to work on the Wheat Creek Meadows/Newfork Potholes projects. The Rock Springs District also completed prescribed upland burns to enhance grass communities that will attract wildlife and livestock away from riparian areas.

OTHER EXAMPLES OF RIPARIAN-WETLAND PARTNERSHIPS AND INTERDISCIPLINARY COORDINATION

State	Office	Project Area/ Activity	Partnerships
Colorado	Canon City	Rio Grande fence construction	Colorado Division of Wildlife, Conejos County
Colorado	Canon City	Arkansas River water assessment	Forest Service, Colorado Division of Wildlife, Colorado Department of Natural Resources, Bureau of Reclamation
Colorado	Canon City	Badger Creek	18 partners
Colorado	Craig	Owl Mountain ecosystem management	Federal, State and local agencies, landowners, and other interest groups
Colorado	Craig	Wolford Mountain mitigation	Colorado River Conservancy District
Colorado	Craig	Walden Res Island maintenance	Colorado Division of Wildlife
Colorado	Craig/ Montrose	Riparian classi-fication program	Colorado Natural Heritage Program, The Nature Conservancy, and 15 other parties
Colorado	Montrose	Dry Creek Basin Coordinated Resource Management Plan	Colorado Division of Wildlife, Natural Resource Conservation Service, private landowners
Colorado	Montrose	Dolores noxious weed control	Colorado Department of Agriculture
Colorado	Grand Junction	Grande Valley soil survey	Natural Resource Conservation Service
Colorado	Grand Junction	Macro-invertebrate study	Eagle County
Colorado	Grand Junction	Sheep Creek Plan	Colorado Division of Wildlife
Colorado	Grand Junction	Gunnison Bluff Plan	Mesa County, City of Grand Junction

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